

REMARKS

Claims 1-15 are now pending in the application. The Examiner is respectfully requested to reconsider and withdraw the rejections in view of the amendments and remarks contained herein.

REJECTION UNDER 35 U.S.C. § 102

Claims 1-4, 5-7, 8, and 10-14 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Morita (U.S. Pat. No. 5,473,186). This rejection is respectfully traversed.

Morita does not show, teach, or suggest a semiconductor layer which contains an element isolation region and adjacent doped layers isolated from each other by the element isolation region and a gate connection layer formed over the element isolation region and the adjacent doped layers, wherein a depth X of the element isolation region and a width Y of the element isolation region satisfy an equation represented by $X/Y = 1.33$ to 1.67 .

For anticipation to be present under 35 U.S.C. §102(b), there must be no difference between the claimed invention and the reference disclosure as viewed by one skilled in the field of the invention. Scripps Clinic & Res. Found. V. Genentech, Inc., 18 USPQ.2d 1001 (Fed. Cir. 1991). All of the limitations of the claim must be inherent or expressly disclosed and must be arranged as in the claim. Constant v. Advanced Micro-Devices, Inc., 7 USPQ.2d 1057 (Fed. Cir. 1988). Morita fails to disclose the limitation of a gate connection layer formed over the element isolation region and the adjacent doped layers.

The Examiner alleges that Morita discloses an element isolation region (e.g. trenches 341, 342 and 343) and adjacent doped layers isolated from each other by the element isolation region. Morita does not disclose a gate connection layer formed over the element isolation region and the adjacent doped layers. Applicant respectfully submits that the specification and FIGS. 1-7 of Morita are absent of any teaching of a gate connection layer.

In contrast, Applicant's claim 1 requires a gate connection layer formed over the element isolation region and the adjacent doped layers. For example, Applicant's FIG.5 illustrates a gate connection layer 21b formed over an element isolation region 19 and wells 11N and 11P. Morita fails to show, teach, or suggest such a structure. As such, Applicant respectfully submits that claim 1, as well as its dependent claims, should be allowable for at least the above reasons. Claim 10, as well as its dependent claims, should be allowable for at least similar reasons.

REJECTION UNDER 35 U.S.C. § 103

Claims 9 and 15 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Morita (U.S. Pat. No. 5,473,186) in view of Liaw (U.S. Pat. No. 5,955,768). This rejection is respectfully traversed.

Claims 9 and 15 depend from claims 1 and 10, respectively. Applicant believes claims 1 and 10 are allowable. Therefore, Applicant respectfully submit that claims 9 and 15 should be allowable for at least similar reasons.

CONCLUSION

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action and the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1600.

Dated: _____

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Respectfully submitted,

By: _____

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